



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,811	09/17/2003	James A. Duggan	1-22818	3457

27210 7590 02/02/2005

MACMILLAN, SOBANSKI & TODD, LLC
ONE MARITIME PLAZA - FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604

EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,811

Applicant(s)

DUGGAN ET AL.

Examiner

Greg Binda

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) 22-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 17 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20040217</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of an assembly in the reply filed on December 29, 2004 is acknowledged.

2. Newly submitted claims 22-30 are directed to an invention that is independent or distinct from the elected invention because the elected assembly can be made by a process that is materially different from that in new claims 22-30. This so because the assembly can be made without any or all of the following: a housing, a slot near a rotational center and a ball.

Accordingly, claims 22-30 are withdrawn from consideration as being directed to a non-elected invention.

3. Claim 21 links the elected invention and that of the withdrawn newly submitted claims. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim, claim 21. Upon the allowance of the linking claim, the restriction requirement as to the linked inventions shall be withdrawn and any claim depending from or otherwise including all the limitations of the allowable linking claim will be entitled to examination in the instant application. Applicant is advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim is presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable.

In re Ziegler, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the arm portions described in the specification at page 10. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 11-21 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. The disclosed invention, a balanced assembly is inoperative because the respective arm portions required to assemble the assembly would impart an imbalance unaccounted for in the assembly. The balance corrective device 20 as shown will only provide corrective balance to the article 15a if the ball 24 is the only variable in the mass distribution of the device 20 (i.e. all other parts (e.g. discs 22 & 23) in the device must have homogenous mass distribution). However, the required arm portions and the slots 22a & 23a, are additional means that vary the mass distribution of the device 20, means whose effects are unaccounted for in the construction of the disclosed invention.

7. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. The claims are directed to the assembly of claim 11 (which is balanced per claim 11, line 1) in combination with a control system for balancing and unbalanced article. Why would a balanced assembly need such a control system? There is no patentable utility of such a combination.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 3679

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 11-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 11, lines 8 & 9 and claim 21, item (d) recite that the claimed invention, an assembly that is balanced for rotation, is made by relatively positioning two discs, but the specification fails to teach how to make such an assembly given that the disclosed invention requires arm portions to relatively position the discs, arm portions that impart imbalance that is unaccounted for in the final assembly.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 13-15 & 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The term "near" in claims 13-15 is a relative term which renders the claims indefinite. The term "near" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Art Unit: 3679

b. The scope of claims 17-20 is unclear. The limitations of claims 17-20 appear to be written so as to read on the combination of elements shown in Fig. 7 which only shows a step in the construction of a final product (shown in Fig. 1). As such the limitations in claims 17-20 do not all appear to be parts of a final product, the stated claimed invention, a balanced assembly.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 11-15 & 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Trumpler, US 1,730,019. Figs. 3 & 4 show an assembly that is balanced for rotation comprising: an article (see “rotor” on page 1, line 99) that is unbalanced (see line 10) for rotation; a balance correction device supported on the unbalanced article, the balance correction device including a first disc 2 having a first slot 7 provided therein; a second disc 2 having a second slot 14 provided therein, and an object 15 received within the first and second slots, wherein the first and second discs are positioned relative to each other to position the object relative to the unbalanced article to balance the assembly for rotation; and a housing 1 that supports the first disc, the second disc and the object on the unbalance article. Fig. 4 shows the first slot 7 begins near a rotational center of the first disc and extends generally linearly outwardly therefrom. Fig. 3

Art Unit: 3679

shows the second slot 14 begins near a rotational center of the second disc (see the lower portion of the slot 14 near where numerals 15 & 16 appear) and Fig. 4 shows that the second slot extends generally arcuately outwardly therefrom. Figs. 3-5 show the control system comprising: a controller 21; first and second motors 20c for moving the first and second discs 2; and a sensor (see “vibrating element or oscillatory bed” on page 2, line 102) that generates a signal that is representative of a magnitude and location of a corrective action that can be taken to counterbalance the imbalances in the unbalanced article.

14. Claims 11, 12, 16 & 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Wyman, US 4,440,123. Fig. 1 shows an assembly that is balanced for rotation comprising: an article (see “shaft” in col. 2, line 29) that is unbalanced (see line 31) for rotation; a balance correction device supported on the unbalanced article, the balance correction device including a first disc 11 having a first slot (see “inner surface” in col. 2, line 26) provided therein; a second disc 15 having a second slot (the inner curved portion of the surface of the cross section of the second disc) provided therein, and a ball 12 received within the first and second slots, wherein the first and second discs are positioned relative to each other to position the object relative to the unbalanced article to balance the assembly for rotation; and a housing 10 that supports the first disc, the second disc and the object on the unbalance article.

15. Claims 11, 13-15 & 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Lohaus et al, US 5,976,020. Figs. 10 & 11 shows an assembly that is balanced for rotation comprising: an article 34 that is unbalanced for rotation; and a balance correction device


Art Unit: 3679

supported on the unbalanced article, the balance correction device including a first disc 26 having a first slot 13 provided therein; a second disc 27 having a second slot 16 provided therein, and an object 11 received within the first and second slots, wherein the first and second discs are positioned relative to each other to position the object relative to the unbalanced article to balance the assembly for rotation. Fig. 10 shows the first slot 13 begins near a rotational center of the first disc and extends generally linearly outwardly therefrom. Fig. 10 shows the second slot 16 begins near a rotational center of the second disc and extends generally arcuately outwardly therefrom.

16. Claims 11, 13 & 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai, US 4,440,123. Fig. 3 shows an assembly that is balanced for rotation comprising an article 51, 54 that is unbalanced for rotation; and a balance correction device supported on the unbalanced article, the balance correction device including a first disc 46 having a first slot 58 provided therein; a second disc 47 having a second slot 59 provided therein, and an object 48 received within the first and second slots, wherein the first and second discs are positioned relative to each other to position the object relative to the unbalanced article to balance the assembly for rotation.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eckel and Mitchell each show an assembly comprising an article and an object.



Art Unit: 3679

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679